

Medical Terminology

| Primary Career Cluster: | Health Science |
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| Consultant: | Amy F. Howell, (615) 532-2839, Amy.F.Howell@tn.gov |
| Course Code(s): | 5883 |
| Prerequisite(s): | None |
| Credit: | 1 |
| Grade Level: | 11-12 |
| Graduation Requirements: | This course satisfies one of three credits required for an elective focus when taken in conjunction with other Health Science courses. |
| Programs of Study and Sequence: | This course is included in the <i>Diagnostic Services, Health Informatics, Emergency Services,</i> and <i>Therapeutic Clinical Services</i> programs of study. |
| Aligned Student Organization(s): | HOSA: http://www.tennesseehosa.org Amanda Hodges, (615) 532-6270, Amanda.Hodges@tn.gov |
| Coordinating Work-Based Learning: | Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit http://tn.gov/education/cte/work based learning.shtml. |
| Available Student Industry Certifications: | None |
| Dual Credit or Dual Enrollment Opportunities: | There are available dual credit/dual enrollment opportunities for this course. For more information, reach out to a local postsecondary institution to establish an articulation agreement. |
| Teacher Endorsement(s): | 577, 720, 721, 722 |
| Required Teacher Certifications/Training: | None |
| Teacher Resources: | http://www.tn.gov/education/cte/HealthScience.shtml |

Course Description

Medical Terminology is a course designed to provide students with the opportunity to develop working knowledge of the language of healthcare professionals. Students will acquire vocabulary-building and problem-solving skills by learning prefixes, suffixes, roots, combining forms, and abbreviations commonly used in medical fields. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures,

and pharmacology. Upon completion of this course, proficient students will be able to apply problem-solving skills to the documentation of medical phenomena and will be able to communicate fluently in the language of medicine when working in healthcare settings. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee Anatomy and Physiology standards.*

Program of Study Application

This course appears in the *Diagnostic Services, Health Informatics, Emergency Services,* and *Therapeutic Clinical Services* programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the Health Science website at http://www.tn.gov/education/cte/HealthScience.shtml.

Course Standards

- 1) Interpret the historical development of the medical language, illustrating the Latin and Greek origination of the medical terms used today. In an informational artifact, detail the importance of historical events in medicine and their relationship to modern medical language.** (TN Reading 1, 2, 4; TN Writing 2, 8)
- 2) Identify and explain the definitions and roles of the four types of word parts (word roots, combining forms, combining vowels, suffixes, and prefixes) in forming medical terms. Apply knowledge of word forms and structures to interpret unfamiliar medical terms throughout this course. Research the origins of eponyms; then differentiate between medical eponyms, acronyms, and abbreviations. (TN Reading 1, 4, 9; TN Writing 8, 9)
- 3) Research and summarize the precautions surrounding the use of abbreviations and symbols within the healthcare profession. Explain and demonstrate the importance of clear, proper documentation when filling out a patient/client chart or other patient document. For example, explain why using appropriate abbreviations is so important when prescribing the correct dosage for a patient's medication (i.e., writing "mg" for milligrams). (TN Reading 1, 2, 4, 5, 6, 9; TN Writing 2, 4, 8)
- 4) Examine a professional medical journal or mock patient document specifically related to an unfamiliar disease, phenomenon, diagnosis, or area of medical research. Demonstrate the ability to locate medical terms and define the prefixes, suffixes, abbreviations, and symbols in order to arrive at a professional understanding of the topic discussed. Interpret and synthesize the text into an original summary, review, or other written or verbal analysis of the topic, showing mastery of unfamiliar terms. (TN Reading 1, 2, 4, 5, 6; TN Writing 4, 8, 9)
- 5) Evaluate multiple evidenced-based research articles. Document in an informational artifact the correlation of diseases and/or disorders discussed in the articles with terminology associated with anatomical positions, body planes, cavities, directional terms, body systems, and symbols. (TN Reading 2, 4, 9; TN Writing 7, 8, 9)
- 6) Analyze and interpret vocabulary related to pathology, diagnostic, and therapeutic medical terms, as well as abbreviations of the body systems below, by evaluating professional texts

featuring such terms. Demonstrate mastery of medical terminology use and accurate spelling in each area through verbal and written explanation.

- a. Cells, tissues, and glands
- b. Genetics
- c. Integumentary
- d. Respiratory
- e. Cardiovascular
- f. Musculoskeletal
- g. Endocrine
- h. Nervous
- i. Lymphatic/immune and hemolytic
- i. Gastrointestinal
- k. Urinary
- I. Special senses
- m. Reproductive

(TN Reading 1, 2, 4, 6, 7, 9; TN Writing 2, 4, 8, 9; TN A&P 2, 3, 4, 5, 6)

- 7) Interpret, analyze, and accurately spell vocabulary linked to diagnostic procedures and pharmacology in the following areas: therapeutic services, diagnostic medicine, biotechnology services, emergency medical services, cardiovascular services, and dental services. Demonstrate the skills involved when interpreting a prescription or complex diagnostic procedure by explaining the terminology, abbreviations, and symbols to a classmate in language that is more familiar and easy to understand. (TN Reading 2, 3, 4, 6, 7, 9; TN Writing 2, 4, 8, 9)
- 8) Research a current medical, legal, or ethical issue found within professional and/or peer reviewed journals. Develop an informative or persuasive article, report, or research paper documenting the concepts and perspectives surrounding the issue. When writing, include appropriate medical terminology and apply conventional citation methods used in medical literature. For example, investigate current debates surrounding stem cell research and argue for whether this line of research benefits the medical community and society at large; or, document the increase in mental health diagnoses and the impact this phenomenon has on the population. Cite all sources used in the course of the research, review, and revise writing as needed. (TN Reading 1, 2, 4, 6, 7, 9; TN Writing 1, 2, 4, 5, 6, 8, 9)

Standards Alignment Notes

*References to other standards include:

- TN Reading: <u>Tennessee State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
 - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN Writing: <u>Tennessee State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).

- Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 10 at the conclusion of the course.
- TN A&P: Tennessee Science: <u>Anatomy and Physiology</u>
- P21: Partnership for 21st Century Skills Framework for 21st Century Learning
 - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Additional Notes

**Informational artifacts include but are not limited to brochures, posters, fact sheets, narratives, essays, and presentations. Graphic illustrations include but are not limited to charts, rubrics, drawings, and models.